

***Listing of the Claims***

This listing of claims will replace all prior versions, and listings of claims in the application.

1-117. (Canceled)

118. (New) A method of delivering a nucleic acid molecule to a cell, comprising:

(a) contacting the cell with a complex comprising the nucleic acid molecule, a fluorescent molecule, and a cellular delivery molecule, wherein the nucleic acid molecule is not covalently bound to the fluorescent molecule; and

(b) contacting the cell with light having a wavelength absorbed by the fluorescent molecule such that the nucleic acid molecule is disassociated from the complex.

119. (New) The method of claim 118, wherein the wavelength of light comprises a wavelength selected from the group consisting of from about 200nm to about 800nm, from about 350nm to about 650nm, and from about 450nm to about 600nm.

120. (New) The method of claim 118, wherein the fluorescent molecule and the cellular delivery molecule are covalently linked.

121. (New) The method of claim 118, wherein the nucleic acid molecule is selected from the group consisting of mRNA, siRNA, shRNA, ssRNA, dsRNA, ssDNA, dsDNA, plasmids, cDNA, and antisense constructs.

122. (New) The method of claim 118, wherein the nucleic acid molecule is an RNA molecule.

123. (New) The method of claim 118, wherein the nucleic acid molecule comprises from about 5 bases to about 200 kilobases.

124. (New) The method of claim 118, wherein the nucleic acid molecule comprises from about 20 nucleotides to about 30 nucleotides.

125. (New) The method of claim 118, wherein the nucleic acid molecule is double stranded.

126 (New) The method of claim 118, wherein the nucleic acid molecule is dispersed in the cytoplasm of the cell following contact with the light.

127. (New) The method of claim 118, wherein the nucleic acid molecule comprises one or more chemical modifications.

128. (New) The method of claim 118, wherein the cellular delivery molecule is comprised within a fusion protein.

129. (New) The method of claim 128, wherein the fusion protein further comprises an accessory polypeptide.

130. (New) The method of claim 129, wherein the accessory polypeptide is an enzyme that has a nucleic acid molecule as one of its reactants or one of its products.

131. (New) The method of claim 129, wherein the accessory polypeptide is a recombinase.

132. (New) The method of claim 131, wherein the recombinase is a site-specific recombinase.

133. (New) The method of claim 132, wherein the nucleic acid molecule comprises at least one site recognized by the site-specific recombinase.

134. (New) The method of claim 118, wherein the nucleic acid molecule includes a sequence that encodes a protein.

135. (New) The method of claim 134, wherein the protein is expressed in the cell.